

Learning-Memory Techniques and Improvement

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Abstract:

Learning and Memory are two entities intertwined within themselves. There are various types of memories. The performance of students and the individual's performance in their regular activity based on wisdom are all the result of the encoding and decoding of the learned ethics through memory. The students are the pillars of the nation. Hence the practise of SKY system is prescribed as an alternative to increase the memory system of humanity.

Introduction

Education is not just about going to school and learning to get a degree. Its about widening your knowledge and absorbing the truth about life - Sakuntala devi.

Sensory perception is the main objective of human relationships. The five senses are categorised as vision hearing, taste Smell and touch. They form the index to learn the base of of more complex physiological and psychological phenomena. The sensory mechanisms are constructed in a way of mediation to respond to the stimuli of senses.

Memorising should be a part of learning .it should just help the learner to retrieve the acquired knowledge in a relative concept of a culture based life activity rather than a grade based record maintained campus learning. This is called transfer of learning.

Values:

Vision and auditory are the main expressive modalities. Language by speech is heard,by scripture is seen. Sight and hearing are called the higher senses. Other seses are essential in the way of life but still they lack the importance since the organising pattern for interaction

relays on eyes and ears. The symbolic behaviour is not effected by other senses hence they are called lower senses. The kinesthesia senses are responsible for the equilibrium of human.

Attention and perception:

Human stimuli do not tend to respond equally to all the impending reflex. The perceptions are selective. Attention is the perceptual focussing. Selected stimuli are attentive while the distracting stimuli are resisted. On a general survey it is assumed that pertinent stimuli are selected by the brain while others are ignored. But still the least attended stimuli are also registered in the perpetual system. This requires a change important for notice for the nervous system to monitor the relevant stimuli. Studies have led to a conclusion imparting to the register of sensory information stored temporarily in a crude form that is unanalysed. The senses with high mental frequency are relevant to the psychological process and await the attentive selected anecdotes.

Stimulus selection and determinants

The personal needs, internal and external, past experiences in compilation with present expectations are equally important in competence with the characters of the stimulus. The physical properties like intensity size, movement and contrast depend on the stimuli attended. Internal variables like expectations and motives play an important role in determining the stimulus of attention. The same stimuli vary according to the habitual and momentary interests of the personalities.

Concepts of Learning and Memory:

Learning is the process where informations are acquired. Memory is the memory input as storage by means of retention. Physiologically Memory is divided as:

- Explicit Memory
- Implicit memory

The Explicit memory is associated with consciousness, recognition, awareness, declaration etc. the same depends on hippocampus and medial temporal lobes of the brain for retention. Episodic memory is based on the events whereas the rules regulation and words come under semantic memory.

Implicit memory is non declarative or reflexive without awareness. It does not involve the hippocampus. It is connected with skills, habits and conditioned reflexes. Activities like riding, driving are explicit memory based during the process of learning. They become implicit once the task becomes voluntary after through learning.

Memory may be short term or long term according to the working. It may be associative and non-associative. Associative learning is the relation of a single stimulus whereas the non-associative learning is habituation and sensitisation.

Visual and auditory memories are pictureisation and vocal reflexes stored for recollection. Working memory retains the information inputs for a short time during which the brain works on the activity. It is the act of visualising a telephone number proceeding with dialling the same through retrieval and not by reading it again. The prefrontal cortex and two rehearsal system form the central executive. They are verbal systems for retain in verbal memories and visio spatial system that retains the objects due visual and spatial aspects.

Learning process

Visual Memory is the leaning process through flowcharts, circuit diagrams, tabular columns and tables. Auditory memory is audio hearing of self-recording lessons or the lectures and required hints.

Retention and recalling are the important factors of learning and memory. This is made easier by using the gadgets and modern technology. Long term storage, audio and video presentations are made through them. Google presents the whole universe in our hands. Thus materials are available in plenty to promote learning.

Disadvantage

The use of technology has come into force from the age of 3 up to the senior citizens level. It many a times fails to enhance memory. For example...the usage of calculator has made the children devoid of learning the mathematical tables. The location maps provided by Google refrains the elders from finding out the location on their own. It has curtailed the human interaction during travel. A long term usage of such devises erases the numerical and topographical DNA particle of the human brain. The following generations are unable to either learn or recollect or even interact.

The memory factor depends upon the continuity of the self perceptions with remembered facts. Memory is viewed under 3 stages

- Encoding – referring to the transformation of sensory information in a format for the memory system to perceive by processing.
- Storage – the information that the memory encodes
- Retrieval – the location of the information as memory to be retrieved.

Faulty memory is the failure at any one of these stages. Cue dependent forgetting is the tip of the tongue state lacking in retrieval of the stored memory. Trace dependent forgetting is due to the decay of the memory trace. Epileptic patients support the hypothesis as the electric stimulation of the brain maintains the permanent relation with forgetting as the cue dependent type. Explanation with regards to traditions of forgetting can be due to decay of the tissues due to disuse effects of interference and motivated forgetting.

Improvement is memory

The methods of encoding and retrieving the informations are to be improved primarily. The use of mental imagery, organisational schemes, self-recitation during study and relearning helps both the encoding and retrieval through retention.

Mental Imagery

People with visual imagery perform remarkable memorious acts. The person would visualise the digits or words sequentially as written down in a paper using his own handwriting. The objects would be visualised by presenting them in a row of order. An imaginary walk by visually placing the objects along the route and repeating the same walk to retrieve is a technique of memory training.

The tasks learned simultaneously one after the other and their influence on each other is called transfer of learning. Positive transfer is the facilitation of learning within each other whereas interference is considered is considered a negative transfer. Learning to learn is a positive transfer by which the situation is relaxed, the irrelevant stimuli is ignored and the relevant cues distinguished by learning the principles in general. The attempt of learning is strengthened by a favour of rewarding the threat of punishment should be removed as the behaviour will be supressing the memory. Experiences of the personal activities followed by emotional factors are subtle and play an important role in learning. The students may be highly anxious and further pressure on their performance may actually bring down their grades.

Mental ability tends to increase upto the age of 26 and then decline after the age of 40. The rate of decline may depend on the health of the individual and occupation through estimates of hereditary and environmental factors like climate, nutrition are the important detectors of intelligence.

Yoga is the merging of humanity (body, soul and mind) with society and nature . To live in harmony he needs to have an elusive memory. Yoga practices are certainly devised to pertain and retain the memory cues of humans. The research in practices have resulted in establishing that yoga practice have raised the memory among students. Yoga research with special reference to kundalini yoga (SKY) devised by Vethatri Maharishi consist of physical exercise, introspection, meditation and kayakalpa practices. Physical exercises are devised to improve the physical fitness of the aspirants.

Introspection practices analyse thoughts, moralises desire, neutralises anger, eradicates worries, enabling man to know his origin of birth and the destination after death.

Meditation brings down the mental frequency, calms the mind with stress levels under control.

Kayakalpa is a practice to free from disease, maintaining the health and retention of youth by postponing death and old age.

Both physical exercise and meditation consist of pranayama practices.they are devised to increase the physical fitness by the maximum input of oxygen which thereby increase the energy level of the aspirant. The air, head and blood circulations are enhanced. Brain cells are activated to prevent decaying. Furthermore the limits and methods are followed in the

activities of food, work, sleep and thought. They are based on limiting and organising the sensual pleasures of human indulgence. This is the means where the usage of technical gadgets could be curtailed.

Visual and auditory coding developed through actual perceptions of human motor skills, independent of gadgets. The limit fixes the extent of usage whereas the methods allow the usage under essential condition.

Meditational process brings down the wavelength of the aspirant. The serene mode to be maintained under all circumstances becomes the habit of life style. Hence decoding the memory stored in the stabilised frequency of the mind is easily retrieved in the long run.

Vedhatri Maharishi felt that learning should be an intuitive process to change the world towards a better living. Establishment of education through gurukula type created everywhere with children according to the age wise with the provision of nutritious food, training in mind power to organise and strengthen thoughts resulting better activities. The curtailing of the affection between the parent and child helps to abort many problems and social differences. The primary education of the child would start from the age of 5 under his parental control. At the age of 10 the child would be sent to a residential facilitated learning centre to take up a junior course for 5 years and continue a senior course for the next 5 years. The residential curriculum would have the factories and farms attached with it. The senior course students will work part time for learning the trade. The Juniors would pick up the basic skills through their assistants. This enables the learning centres to form a self sufficient unit. Military training under the National Defence Academy would also be imparted in the learning system. Children in pursuit of higher education and research can see suitable institution with a part time course to enable earning

Food is a very important factor in maintaining the health of the learners. Psychological improvement or up gradation cannot be done without maintaining the physical feature of the students. The testing scales are to be redefined. Rating systems through marks should be abolished. This will upgrade the general knowledge of the students rather than their skill to reproduce the memory based subject material from the prescribed text..

The syllabus of the educational institutions are categorised by Maharishi under the following 4 categories

- Writing Skills – Learning to read, write and speak languages
- Trade skills – Learning a trade
- Learning the principles of Nature to admire the nature by unravelling its truth,
- Discipline – Learning the virtue of life through morality, duty and charity

Conclusion

Learning is a physiological and psychological schematic representation of the input through the device of memory. The various type of memory, the coding and encoding features, their functioning patterns were explained. The degeneration of the memory system and the method of retention through SKY yoga practises has been elucidated. Vision for Wisdom, the institution for the convergence of spiritual education and life education was founded by

Vedatri Maharishi. This learning process through this institution will enhance man to establish a world free from poverty and warfare allowing to flourish in various aspects of life.

Reference

Thathuvagnani Vethathri Maharishi – Simplified physical exercise

Thathuvagnani Vethathri Maharishi – Method of Food

Yogiraj Vethathri Maharishi – Logical solutions to social problems (Tamil)

Yogiraj Vethathri Maharishi - Prosperity of India (English)

Yogiraj Vethathri Maharishi – Transformative history of the divine

Yogiraj Vethathri Maharishi – Vethatriyam (Tamil)

Yogiraj Vethathri Maharishi – World Peace (Tamil)